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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicant : Cristina Gomila et al.  
Serial No. : 10/569,318  
Filed : February 22, 2006  
For : METHOD AND APPARATUS FOR MODELING FILM GRAIN  
: PATTERNS IN THE FREQUENCY DOMAIN  
Examiner : Not Yet Assigned  
Art Unit : 2812

INFORMATION DISCLOSURE STATEMENT

- ☒ 1 Pursuant to 37 CFR 1.97(b)  
[within 3 months of filing or prior to 1st Office Action]
- ☐ 2 Pursuant to 37 CFR 1.97(c)  
[before Final Office Action or Allowance]
- ☐ 3 Pursuant to 37 CFR 1.97(d)  
[after Final Office Action or Allowance, but prior to payment of Issue Fee]]

Mail Stop Amendment  
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Sir:

The following are submitted in the above-identified application in compliance with 37 CFR 1.97 & 1.98:

☒ 4 A list of documents on form PTO/SB/08a and/or PTO/SB/08b together with copies of each identified document and a translation or a concise explanation of each non-English language document is enclosed herewith.

This paper is submitted in accordance with:

- ☒ 5 37 CFR 1.97(b): [within 3 months of filing or prior to 1st Office Action]
- ☐ 6 37 CFR 1.97(c): [before Final Office Action or Allowance, whichever is earlier]; and
- ☐ (a) The required certification made in item 8(a) below; **OR**
- ☐ (b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.
- ☐ 7 37 CFR 1.97(d): [after Final Office Action or Allowance, but prior to payment of Issue Fee]; and
- ☐ (a) The required Certification made in item 8(a) below; **AND**
- ☐ (b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.

☐ 8 Certification

- ☐ (a) Each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
- ☐ (b) No item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing this document after making reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing of this Statement.

☒ 9 Please charge the applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 07-0832. An original and one (1) copy of this document is enclosed.

Respectfully submitted,  
CRISTINA GOMILA ET AL.

By: 

Robert B. Levy, Attorney  
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DATE: 5/16/07

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Lori Klewin

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**Complete if Known**

<b>Application Number</b>	10/569318
<b>Filing Date</b>	FEBRUARY 22, 2006
<b>First Named Inventor</b>	CRISTINA GOMILA ET AL.
<b>Group Art Unit</b>	2812
<b>Examiner Name</b>	
<b>Attorney Docket Number</b>	PU030259

Sheet	1	of	3
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U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		US20020034337		SHEKTER	03-21-2002	
		US4935816		FABER	06-19-1990	
		US5140414		MOWRY	08-18-1992	
		US5335013		FABER	08-02-1994	
		US5374954		MOWRY	12-20-1994	
		US5406326		MOWRY	04-11-1995	
		US5471572		BUCHNER ET AL.	11-28-1995	
		US5475425		PRZYMORSKI ET AL.	12-12-1995	
		US5629769		COOKINGHAM ET AL.	05-13-1997	
		US5641596		GRAY ET AL.	06-24-1997	
		US5687011		MOWRY	11-11-1997	
		US5709972		COOKINGHAM ET AL.	01-20-1998	
		US5767860		ZIMMER ET AL.	06-16-1998	
		US5831673		PRZYMORSKI ET AL.	11-03-1998	
		US5457491		MOWRY	10-10-1995	

[illegible]

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/569318
				Filing Date	FEBRUARY 22, 2006
				First Named Inventor	CRISTINA GOMILA ET AL.
				Group Art Unit	2812
				Examiner Name	
Sheet	2	of	3	Attorney Docket Number	PU030259

<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		, AL-SHAYKH ET AL, "Lossy Compression of Images Corrupted by Film Grain Noise," School of Electrical and Computer Engineering, 1996 IEEE.	
		, AL-SHAYKH ET AL, "Restoration of Lossy Compressed Noisy Images," IEEE Transactions on Image Processing, Vol. 8, No. 10, October 1999.	
		, AL-SHAYKH, "Lossy Compression of Noisy Images," IEEE Transactions on Image Processing, Vol. 7, No. 12, December 1998.	
		, BRIGHTWELL ET AL, "Automated Correction of Film Unsteadiness, Dirt and Grain," International Broadcasting Convention, September 16-20, 1994, Conference Publication No. 397, IEE, 1994.	
		, CAMPISI ET AL, "Signal-Dependent Film Grain Noise Generation Using Homomorphic Adaptive Filtering," IEE Proceedings, Image Signal Process, Vol. 147, No. 3, June 2000.	
		, ZHAO ET AL, "Constant Quality Rate Control for Streaming MPEG-4 Fgs. Video," Integrated Media Systems Center and Department of Electrical Engineering, University of Southern California, 2000 IEEE.	
		, CHAVEL ET AL, "Film Grain Noise in Partially Coherent Imaging," Optical Engineering, Vol. 19, No. 3, May-June 1980.	
		, FISCHER ET AL, "Image Sharpening Using Permutation Weighted Medians," Department of Electrical Engineering, University of Delaware, fischer@ee.udel.edu, paredesj@ee.udel.edu, arce@ee.udel.edu.	
		, ILLINGWORTH ET AL, "Vision, Image and Signal Processing," The Institution of Electrical Engineers, IEE Proceedings, June 2000, Vol. 147, No. 3.	
		, MCLEAN ET AL, "Telecine Noise Reduction," XP-002285972, 2001 The Institute of Electrical Engineers.	
		, OKTEM ET AL, "Transform Domain Algorithm for Reducing Effect of Film-Grain Noise in Image Compression," Electronics Letters, October 14, 1999, Vol. 35, No. 21.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet	3	of	3	Attorney Docket Number	PU030259

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Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		, PRADES-NEBOT ET AL, "Rate Control for Fully Fine-Grained Scalable Video Coders," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002), SPIE 0277-786X/02.	
		, SCHAAER ET AL, "Fine-Granularity-Scalability for Wireless Video and Scalable Storage," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02.	
		, SHAHNAZ ET AL, "Image Compression in Signal-Dependent Noise," Applied Optics, Vol. 38, No. 26, September 10, 1999.	
		, YAN ET AL, "Efficient Video Coding with Hybrid Spatial and Fine-Grain SNR Scalabilities," Department of Electronic Engineering, Beijing Institute of Technology, China.	
		, YAN ET AL, "Film Grain Noise Removal and Generation for Color Images," Department Electrical and Computer Engineers, University of Toronto, dimitris@comm.toronto.edu.	
		, YAN ET AL, "Signal-Dependent Film Grain Noise Removal and Generation Based on Higher-Order Statistics," University of Toronto, Department of Electrical and Computer Engineering, dimitris@comm.toronto.edu, 1997 IEEE.	
		, YOSHIDA, "Go with the Grain, Film R&D Chief Urges, for Art's Sake," EE Times, February 07, 2005.	
		, ZHANG ET AL, "Constant Quality Constrained Rate Allocation for FGS Video Coded Bitstreams," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02.	
		PENG ET AL, "Adaptive Frequency Weighting for Fine-Granularity-Scalability," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02, pp. 840-849.	

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